MINTUES OF THE JUNE 4, 2008 NATURAL AREA RESERVES SYSTEM COMMISSION (NARSC) ENHANCEMENT SUBCOMMITTEE MEETING, HONOLULU

SUBCOMMITTEE MEMBERS:

DRAFT Subject to approval

Dr. Dale Bonar, Chair

Dr. Scott Rowland, Vice Chair

Dr. James Jacobi

Dr. R. Flint Hughes

Mr. Scott Derrickson, for Director, Office of Planning (OP)

Mr. Patrick Conant, for Director, Department of Agriculture

STAFF:

Ms. Betsy Gagné, DOFAW

Mr. Randy Kennedy, DOFAW

Mr. Bill Evanson, DOFAW

Mr. Matt Ramsey, DOFAW

Ms. Emma Yuen, DOFAW

Mr. Bryon Stevens, DOFAW

Mr. Peter Lander, DOFAW

Mr. Michael Constantinides, DOFAW

Mr. Ronald Cannarella, DOFAW

VISITORS:

Ms. Page Else, Hawai'i Conservation Alliance

Ms. Stephanie Lu, The Nature Conservancy

Dr. Jonathan Price, University of Hawai'i Hilo

Mr. Rick Warshauer

Mr. Jordan Jokiel, East Maui Watershed Partnership

ITEM 1. Call to order and introduction of members. Chair Bonar called the Subcommittee Meeting to order at 10:30 a.m.; members introduced themselves, followed by audience members.

ITEM 2. Develop a data-driven and objective approach for identifying what areas throughout the State would qualify as Natural Area Reserves (NARs), based on existing criteria. Staff Yuen gave a brief introduction and overview for the subcommittee meeting, in a powerpoint presentation that included an agenda to discuss:

- How present level of protection and threats to an area should be considered in prioritization of areas.
- Whether the Commission should focus on designating native ecosystems that are more intact or natural communities that are not represented in the NARS but may be more threatened and modified.

- How to measure the Scientific Value and Representativeness criteria, which are
 the first cut of the prioritization process; Dr. Price and Member Jacobi have
 compiled information that can be useful for this measurement and will be
 presented in this meeting. Review of analysis that TNC presented in last
 Commission Workshop.
- What additional information is needed for this analysis.
- Recommending a process to involve land managers and gain their expertise.
- Timeline for the analysis as well as the timing for existing submitted Hanawi Expansion nomination.
- Report to full NARS Commission with recommendations for both the process for analyzing as well as a list of areas.

Staff Yuen invited scientists, land managers, and audience to be involved in the discussion, as she had invited them specifically for that purpose. Chair Bonar mentions that it is the goal of the Commission to move the process along quickly. Staff Kennedy said that there has previously been a lack of capacity for NARS Enhancement but now has created a NARS Enhancement Coordinator position that has been filled by Staff Yuen.

Member Jacobi said that this is an ambitious project and that much is needed, but it is not a long process. They already have a lot of information from Dr. Price as well as others, and the previous work on this process is also valid. The black box is the NARS Commission; need momentum. Chair Bonar said that these areas have been on the list for a long time; the goal is to move on them, and move as fast as possible.

Staff Yuen introduced Staff Constantinides, Forestry Program Manager and gave a review of the current agenda item. Member Jacobi said that they wanted to know how to make an integrated process. Staff Constantinides said that his key points were that any nomination should look at the current status of the land. His personal feelings were that there is a fairly good history of Forest Reserve management to be hands-off. In order to get management of land, is working with staff foresters to affect change of attitude. Said there is a belief that in order to get management of lands, the land should be transferred to the NARS for better management. That is until now - has been working 2-3 years with branch foresters to change that old attitude. There is a good deal of animosity between NARS and Forest Reserves in the branches. Wants to take Forest Reserves and keep it in the Forest Reserve in a "NARS type" management regime to reflect what the NARS crew does on a day to day basis: this is what he wants to move forward. Staff Constantinides said that when looking at the current status of these proposals, he believes that a piece of land in the Forest Reserve is protected, and wants to make sure that the nomination process looks at the levels of threat. Forest Legacy considers levels of threat when selecting areas: development threat, current level of human use, biological threats. A lot of land is in the Conservation District Protected Sub-zone, which is very restrictive about what can be done in that area; for example, Koa Timber has been trying to get a Conservation District Use Permit to log koa, but has been unable to get a Conservation District use permit (CDUP) from the Board of Land and Natural Resources in years. Staff

Constantinides said that there has been a lot of activity in acquiring land, and some of those lands could be designated as a Forest Reserve or NAR.

Member Hughes asked whether fencing could become a priority in a Forest Reserve. Staff Constantinides said yes, and has had extensive discussions for years with Forestry to prioritize sections of Forest Reserves and manage those as ungulate free units. To make this happen, there are partnerships with the Forest Reserves and Watershed Partnerships; has worked with Jordan Jokiel on Maui. Watershed Partnerships are on the leading edge of effort for fencing.

Member Rowland asked why Staff Constantinides wants these areas to be Forest Reserves instead of NARS: because it is easier to do; or because it is aggravating turf issues? Staff Constantinides answered that it was all of the above; administrative process of NARS designation is pricier. If there is the will, budget, and resources, then the Forest Reserves should do it, at not as high a price.

Member Rowland asked whether the goals will survive Staff Constantinides. Staff Constantinides replied that his gut feeling is yes, though does not know. He sees a sea change in forestry, where there is now more environmental awareness. Member Hughes said that that is why they designate areas, because personnel changes over time. Staff Constantinides said that the Forestry Program is starting a long-term, formalized process to draft management plans. Within those plans there are areas of native forest that should be protected and have been identified as a high priority for preservation.

Member Jacobi: DOFAW's mandate is for Forestry, Recreation, and Conservation. There needs to be a description of the scope of areas; for instance, the preservation of Ka`u: some want the preserved area to be smaller, others want it larger. There are so many designations: NARS, Forest Reserves, Wilderness Areas, Plant Sanctuaries, but the NARS has a very clear mandate, and has accompanying action on the ground that consistently goes there. NARS has a very solid goals in what a NAR is, and a shared vision of what to do; the vision of other areas, like Alaka`i Wilderness Preserve and Pu`u Wa`awa`a is not clear.

Chair Bonar said there is a need to evaluate who is best to manage areas in long term. Think that private lands can be the best management, all committed to Partnerships to make things work best. It was a 2 year process to close the NAR for the environment. With the attitudes of Forestry, there is room to work and make sure things needing protection are done with resources available. Chair Bonar expressed appreciation that Staff Constantinides attended the meeting, and other members agreed.

Staff Evanson mentioned that it was ironic that NARS-style management had its roots in the Forestry management of the 1920s: the large-scale aggressive ungulate removal and planting. The reality matters and what actually happens. For instance, the fence repairs in Moloka'i Forest Reserve were done with smooth wire fence, meant to allow the flow of animals through the fence, where nearby is a similar area that needs aerial shooting! Reality matters, and what happens on the ground makes the difference: a fence is not just

a fence; the details matter. Staff Constantinides was not sure about that fencing project. Chair Bonar mentioned that this is an example that shows how we need to work together more, be more similar in management and cooperate.

Member Jacobi said that our common ground is that we are looking to identify the best areas to be included in the NARS. One question is whether the objective of the NARS is to come up with examples of communities or become a major piece of the State's conservation picture. Chair Bonar mentioned that they have a shared vision and have a need for more money; we all need to push the Legislature and Chairperson to increase sources of funding so we can afford to take an area into a NAR. Staff Constantinides said that the Forest Reserves take land under their inventory to bank it. It might be better to have a land under public ownership rather than have it remain in private ownership. Passive management is not necessarily a bad thing. Member Hughes said that management is only going to get harder, and crews are going to be taxed to keep things up; we should go to the Legislature together to get more money and it will be a more powerful sell to make everyone more effective.

Staff Evanson asked whether managers have been receptive to the changes that Staff Constantinides mentioned. Staff Constantinides said yes, has worked with them and Forest Reserves is a multi-use designation but preservation is a "use" as well; he mentioned Watershed Partnerships as examples of preservation management.

Staff Evanson said that the branch is exclusive rather than inclusive in practice. Chair Bonar said that is part of the Strategic Plan discussion, and not to be discussed today. Staff Evanson said that there is a need to work internally within the divisions; he does not care who manages an area.

Member Derrickson thanked Staff Constantinides for coming and his candor; recognizing the multiple use that they must wrestle with, and appreciates how Staff Constantinides is part of the process; other options to preserve land would be NAPPs, etc. Staff Constantinides mentioned land acquisition. Chair Bonar discussed the Legacy Land bill that was proposed for some of the money to go into management of the area.

Staff Constantinides said he would like to participate more in meetings, and talk about how existing NARS should be managed; need more restoration for the banged-up areas. Also, it would be good for Commission to look outside DOFAW inventory and talk to them about areas within DOFAW if there is a need for extra management. That would do a lot to show both sides the internal struggle. Honouliuli is an example of area that they are trying to acquire and parts of it are NAR quality and could be turned into a NAR.

Member Jacobi thanked Staff Constantinides and Staff Cannarella, and mentioned the overlap and how could share data. Staff Cannarella said that they are in a process of revising DOFAW's management guidelines and have a tentative DOFAW Family Meeting set September 17 and 18 to re-do maps.

Staff Yuen changed agenda of meeting to discuss how to measure the Scientific Value and Representativenes criteria. Summarized discussion from the April 21, 2008 NARS Commission Workshop on Enhancement, and the presentation given by Theresa Menard, from The Nature Conservancy.

Member Jacobi said that there needs to be a discussion of the size and scale of the NARS. Staff Yuen said that the NARS has a very broad mandate and the criteria also is very broad as well, which could be interpreted as going for areas that are not represented, or only areas that are relatively unmodified. Member Hughes said that by prioritizing montane areas, that is far away from the Representativenes goal; he cautioned about considering areas for removal, giving an example of areas that people thought were banged up, such as Laupahoehoe, but when did studies, these areas were far more biodiverse than thought, and rivaled the higher areas that did not seem at first take like Strawberry guava wastelands. Dr. Price said it is an ongoing project to assess the species composition of areas that are high diversity of native species but are also invaded by a high diversity of invaders. Member Rowland said that to not answer Staff Yuen's question; go for two areas first and see what more is needed in this process. Staff Yuen said that the different directions that the NARS Commission recommends definitely leads to different results in the end. Should the areas nominated be on a case-by-case basis? Member Rowland said it is like comparing apples to oranges: should we try to focus on similar areas as TNC does, mentioning the very small areas that TNC would not think were viable. Staff Kennedy said that in some cases, the plant sanctuary is the appropriate designation within the Forest Reserves. That designation could resolve the need in really small areas; that led to around 150 fences in the state in Plant Sanctuaries.

Member P. Conant said that threats and urgency are important, for instance, if an area in Ka`u is just beginning to get goats coming in. Member Jacobi said that in process you need to do both, take advantage of opportunities and prioritize. Staff Evanson said that the threat of development and other threats were the beginning of the NARS.

Staff Kennedy said that there are other ways to address threats, such as the Pupukea purchase; need to follow statute. Mr. Warshauer brought up the concepts of representativeness and duplication: all forests are different, all are gradations of each other, so none duplicate each other. Size is most important, gives a longer change to have preservation capability: the larger the better. Dr. Price said it is important to keep opportunities in mind. Member Hughes said that everywhere has dynamic changes and is being threatened; dry areas are left out and need more. Member P. Conant said that there can be duplications.

Staff Yuen asked if there is a spectrum of threats, with some being more changed than others, where on that spectrum should the NARS focus? Dr. Price said that there is no way to cut it and there is not a one-dimensional spectrum of threats. Member P. Conant said that as long as the area is protected and has fences and ungulates removed, that would be the bottom line. Member Jacobi said that the mandate is more important: look at management options that may point to others and not some; Member Derrickson agreed. Staff Lander directed attention to the existing statute. Chair Bonar said the

priority areas should be the pukas in the NARS. Member Jacobi said that we do not have all the variables yet, and Dr. Price's data looks at the broad spectrum of the landscape.

Member Rowland suggested to pick one area and start the analysis on that to see how the analysis would work, so it could be fine-tuned later. Mr. Warshauer mentioned that the data does not disqualify any areas; it just reinforces their nomination. Ms. Lu said that The Nature Conservancy measures "Conservation Management" by looking at the intent, tenure, commitment, and manager effectiveness.

Chair Bonar agreed and said that all should be sharing all layers; then called for a recess for lunch at 12:07 p.m. Chair Bonar reconvened at 1:00 p.m.

Staff Yuen summarized the existing tools that have been developed to use to prioritize areas by finding gaps in the NARS: the Natural Communities Matrix, The Nature Conservancy's work on the location of NARS in relation to remaining native ecosystems, as well as other studies to determine important anchialine pool sites, and streams, such as the new stream Atlas developed by the Division of Aquatic Resources. Staff Lander asked about Dr. Lamoureux's matrix that could measure representation. Staff Yuen asked if that should be used since the other ecosystem classifications (i.e. Alpine, Subalpine, Montane Dry, etc.) were too broad? Staff Stevens said the statute's wording of communities was more of a broad brush. Member Jacobi said that the natural communities are not mapped, though the HI GAP attempted to do that, and there are around 400 natural communities listed so it is hard to get down and measure which ones are viable. Staff Yuen introduced Dr. Price.

Dr. Price gave a powerpoint presentation that displayed the methods and maps for measuring various NARS criteria. He mapped the ranges of over 1000 plant species and native bird species, based on known ranges, and habitat types (substrate, moisture levels, island presence), and habitat quality. This could show rarity; whether species have been driven to rarity or were confined naturally. Native-intactness was derived from HI GAP but finding the level of intactness in dry forest is hard for the technology used. But, HI GAP is statewide and allows for a comprehensive look.

Member Hughes asked whether they could overlay areas not developed but also not protected from development? Member Derrickson asked whether they could see state lands. Dr. Price continued with presentation, showing maps of concentrations of species that were not protected by management intent #3 and 4 as measured by HI GAP. Additionally, he showed predicted species richness, but mentioned that richness as a value is limited and does not take into account differences. Another map displayed was of the richness of species that had had a large percentage of their habitats already lost which related to global endangerment.

Member Derrickson said that the first cut should be looking at species and communities not protected in NARS and NAPPs, and perhaps then look at ones that are not in Watershed Partnerships? Member Jacobi said that the data set is a tool, and we can apply it differently.

Dr. Price displayed tables of the proposed NARs that showed how they measure against the various measures that he mentioned (e.g. size, species richness, etc.). Then, he showed a case study of proposed Hono O Na Pali NAR extension in an interactive GIS presentation.

Staff Yuen asked meeting attendees what information is still needed for this analysis, and how they would use it, and whether each place would need detailed information? Member Rowland said that ground-based knowledge is needed, and that the analysis cannot be purely model-driven. Chair Bonar said it would be helpful to compare existing NARS to the table that showed the proposed NARs.

Staff Yuen mentioned her work on finding information about unrepresented anchialine pools, and priority streams with Bob Nishimoto and Glenn Higashi. She mentioned this analysis does not contain information about geological features or marine areas, and asked whether more makai information is needed, and asked what the next steps for the analysis would be.

Member P. Conant said that Staff Yuen should integrate the analysis and then simplify it. Member Jacobi mentioned that the subcommittee should then get back together. Staff Evanson said there is a question of the scope of the analysis and the level of detail needed. He said that we have so much data and it is important to spend a reasonable amount of time and not too much. He recalled the whale sanctuary which had a lot of information but was stalled due to politics. He said the information is coming together really nicely and appreciated the analysis.

Member Jacobi said that some of the bird groups, like the seabirds and waterbirds, do not have tools to plug those in. Chair Bonar said that Emily Fielding from The Nature Conservancy would be a good person to talk to for the marine areas analysis. He said that the coastal information would evolve over the next two years; looking at the existing list, no marine areas are mentioned; start with Representativeness.

Staff Kennedy said that if there is an opportunity to move on an area, should it jump to the top of the list; mentioning Kure Atoll as an example. He said that the Alaka`i is legally protected; but Member Hughes said that it is not managed. Chair Bonar said that the door has been opened, and need to ask how to manage the Alaka`i in a NARS style; he also mentioned that the Strategic Plan has a process to encourage cooperation with Watershed Partnerships.

Staff Evanson said areas with opportunities and threats should be priorities. Mr. Jokiel said that NARS is not the only mechanism; and recreation and its role in DOFAW is something they are working on in their draft Management Guidelines. Said to look at the perception of NARS, and how many will fight the proposals.

Chair Bonar said that Legacy Lands looked at stewardship and there was recent legislation to plug money (5%) into management. Member Rowland asked what if a

study took all the tools and applied them to one NAR proposal, like the Kanaio Makai proposal which is owned by Land Division? Staff Evanson said that it was not the only coastal makai Kanaio Extension; could also have `Ahihi Kina`u extension. He said that the Kanaio NAR extension boundaries were wrong, and that the makai portion was more important. Member Jacobi said it could be compared with the whole system, and that the study should do both parallel: look at the proposed list and concentrate on these areas, and then what is missing from the whole NAR, how it fits into the big scheme.

Member Rowland suggested making a Kanaio NAR addition and following the process; he also wanted to know what rare plants are present. Dr. Price said they are predicted to be there, but not necessarily there on that species list. Staff Yuen asked whether they wanted her to put together a nomination? Member Rowland said yes, even though you do not think you have a complete process. Staff Kennedy said that Hanawi has already been nominated to the NARS Commission; so have to move on this, since it is a prepared nomination. Member Rowland said that Kanaio is better practice from scratch; tests the system. Dr. Price said it was important to vet it out. Staff Yuen said that the Hanawi Expansion has a nomination that went to the NARS Commission; should we compare proposals with each other? Member Jacobi said that one is proactive and reactive; should look at what is missing from existing and proposed lists. Staff Evanson said that they should look at low hanging fruit and threats. Member Rowland said that they should concentrate on a small number and not worry about others. Member P. Conant said to take Dr. Price's model, as well as the old stuff, and run with it. Staff Yuen said she could go with what has been gathered, and that the process is useful and can put together a matrix.

Member Derrickson said that the Kaua'i Forestry Program does not have a problem with the Hono O Na Pali Extension, and that makai areas are not part of the Forest Reserve; but need to know what we are up against. Chair Bonar said that they should identify areas to be added to the NARS and talk to Staff Constantinides about the ones in the Forest Reserve. Staff Evanson said that they need Paul Conry (DOFAW Administrator) in on this. Staff Kennedy said that Administrator Conry has respect for the NARS Commission.

Staff Stevens said that when he was looking at the holes, and at The Nature Conservancy's exercise, it does not include comparison with other areas, primarily the NARS; no acreage information in the National Parks, etc; need to get a better picture of holes; discussed Kanaio makai, said was full of rocks. Staff Kennedy said that the Kanaio coastal area is up for grabs so perhaps need to go for it now.

Chair Bonar said that need to look at lands under perpetual easement on the list. Dr. Price said that they need to look at management intent priorities one and two. Chair Bonar said that the process should look at representation both in areas that are not in NARS as well as areas not in management intent status one and two.

Ms. Else mentioned that there is a programmatic need to unify what they are doing, since she is approaching staff to measure indicators for the Effective Conservation Project.

Member Jacobi said that NARS process is best because it is focused on conservation and protective management. Staff Kennedy said it should establish need: is this area being managed or not?

Member Hughes asked for a update on the public hearings. Staff Yuen said that the Poamoho public hearing was on April 30 and the Hono O Na Pali Extension was going to be held on July 7 in Kaua`i. She asked what do we need more, when are we going to prioritize and reach land managers? Staff Kennedy said they are in the process of developing budget for the enhancement project. Chair Bonar said that there should be some analysis. Member Jacobi said that it should not be at the Natural Community level.

Member P. Conant asked if the tables could be merged. Chair Bonar said need a list of what is missing, and see if proposed ones are good to fit into that. Then the other managers can get together.

Member Derrickson said that the analysis should be filled in and then the Commission can talk about boundaries. Dr. Price said there is a need to fill in the boundaries for the analysis, like at Koai'e Canyon.

Dr. Price asked about weighting different values, since you can add them up as a number but it is comparing apples and oranges. Member Jacobi said that there are five or six ways to look at plants. The trick is how to code them. Run the ones that are up against those that are already in the System. Dr. Price said that for `Ilio, there needs more general data.

Member P. Conant said there are too many values. Member Jacobi said that the interpretation is the difficult part. Member P. Conant said complete as much as possible. Staff Evanson said that then more data will be added when the nominations go to the NARS Commission.

Staff Yuen asked about timing of the process. Staff Kennedy said now there is capacity to do this process; Member Derrickson agreed to move on the process and designation and to get nominations together.

Staff Evanson asked when the process, the product, will be delivered? Chair Bonar said that this is new ground, with this analysis, some on the list might make it, some might not; so then move on the individual ones. Member Jacobi said that by the end of August, go through the matrix and see what holes are there, then from August to December, will have gone through the list and figured out which ones are missing.

Staff Yuen said that for this time frame, need input on the NARS Commission's involvement, and perhaps there should be another meeting in the end of July or August to fill in the gaps; also, will need to call everyone to answer specific questions and get feedback. Chair Bonar said that Staff Yuen should make the first effort and give them product for them to comment, and call a meeting if needed; run with it.

Member Jacobi: should this be a full NARS Commission meeting or a Subcommittee meeting? Chair Bonar said it depends on first cut, and if need more time with the Subcommittee, then will call a meeting; if it is good, then will go to the NARS Commission. Member Jacobi asked Dr. Price to schedule at least 2-3 days to work on this. Dr. Price mentioned he was working on a model concurrently, and so he could work on this too along with Member Jacobi. Chair Bonar said to Staff Yuen that she needed to make the call whether to call a NARS Commission meeting; she will know from our comments. Member Jacobi said that they need to have Commission buy-in to the process. Chair Bonar said the staff also needs to be involved, and that Staff Kennedy should give her the authority to push staff for involvement.

Member Derrickson said a goal would be to have two nominations completed by the end of the year. Staff Yuen clarified that it would mean nominations recommended by the NARS Commission by the end of the year; the rest is out of their control. Member Jacobi said that he wants movement on Poamoho and one other; do not want to be here a year from now.

Staff Yuen introduced the final discussion item, the timing of the Hanawi NAR nomination and handout, which had lists of threats, scientific value and information on the urgency. Mr. Jokiel said that the urgency is a little different because when this nomination was drafted, they had a problem with management but now they had an animal control permit for this year but need longer term protection; he would like to move forward and is now talking with Staff Constantinides; wants to see Forest Reserves and NARS staff work together better and would not like this proposal to derail the process.

Member Jacobi recommended putting it in the DOFAW process. Chair Bonar said that he needs to work with them in a meeting in July for the NARS Commission and nomination being sent to DOFAW. Wants to talk with DOFAW first. Mr. Jokiel said that as long as the process is done in this calendar year and not in the next three years.

Staff Stevens said that a good idea would be to enlarge the NAR along the slope to the East Bogs, and have a greater North Slope of Haleakala NAR; the current Hanawi NAR boundaries are not sufficient. Mr. Jokiel said that might throw off Forestry from putting up funding for a fencing project. Chair Bonar said he appreciated the fencing plans and to hold off on it for next six months or so. Staff discussed where bogs were in relation to proposed fences.

Chair Bonar said that in the interim needs to talk with Staff Constantinides and Mr. Jokiel to build up a relationship and get more people engaged, before NARS Commission meeting in September.

Staff Yuen said that soon there will be a nomination for the Wai`anae Sinkholes with anchialine pools.

ITEM 3. Announcements. Staff Yuen announced that the public hearing process for NARS designation will be on the June 13, 2008 Board agenda. On May 23, the Board approved holding a public hearing for Hono O Na Pali NAR expansion. The NARS website is now live; check it out and return any comments as soon as possible.

ITEM 4. Adjournment. Chair Bonar adjourned Subcommittee Meeting at 4:47 p.m.

Respectfully submitted,

Betsy Harrison Gagné, Executive Secretary

NARS Commission